

ABSTRACT OF THE DISCLOSURE

In a piezoelectric actuator, a first driving signal amplified a predetermined sine wave is applied to a piezoelectric device in a direction parallel to a polarization direction thereof. A second driving signal having a negative phase with respect to the first driving signal which is amplified the sine wave is applied to the piezoelectric device in a direction opposite to the polarization direction. Thus, the piezoelectric device is driven by a driving signal amplified the first or second driving signal double. Voltages of the first and second driving signals are much smaller than a voltage of inversion of polarization of ceramic thin plates constituting the piezoelectric device.